BOY SCOUTS OF AMERICA
National SeaBase Training Camp
CASE STUDY

LOCATION: Marathon, Florida Keys USA

SYSTEM CONFIGURATION:
224 sf of Flat-Plate Active Collectors
4 Building Installation
Open Loop Design

Total Domestic Hot Water Heating Loads:	**Av/Day: 350 Gal/Day**
Water Heating Requirements:	**Input Level: 78 deg F** **Max Temp Req: 140 deg F**
Solar Provision (%) of Daily Load:	**82% Daily Average Load** **65% of Daily Maximum Load**

Project Background

The Boy Scouts of America (BSA) National SeaBase is a recently constructed training facility that hosts over 5000 scouts annually. In their design, BSA project engineers sought an approach which would support low monthly operating expense but also would protect the environmental integrity of the Florida Keys' fragile ecosystem.

As the Keys are an area susceptible to both strict environmental laws as well as storm-based power outages, the architects designed the seven-unit facility to incorporate a renewable energy source.

Solar water heating (SWH) was chosen primarily for its reliability and operating cost efficiencies. The SWH panels passed final testing by remaining in place and intact during Hurricane Hugo's sustained winds of 180 mph and gusts in excess of 230 mph.